

AMENDMENTS TO THE DRAWINGS

In this response the structure and arrangement disclosed in the paragraph spanning page 7, line 20-page 8, line 22, is illustrated in newly added Figs. 5A – 5D. Note the amendments to the specification set forth *supra*. Inasmuch as the newly added drawings merely illustrate that which was originally described, it is submitted that they do not constitute new matter.

REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration are respectfully requested in view of the preceding amendments and the following remarks.

Claim Amendments/Status

Claims 7, 9 and 13 have been amended. Reconsideration and allowance of the present application based on the following remarks are respectfully requested. These amendments include the deletion of “a device isolation structure in a semiconductor substrate” and thus obviate the need to illustrate this feature.

Specification

The title of the invention has been amended in accordance with the Examiner's suggestion. Accordingly, the title now reads:

METHOD FOR MANUFACTURING CODE ADDRESS MEMORY CELL BY WHICH A STACK INSULATING FILM OF AN OXIDE FILM AND A NITRIDE FILM USED AS A DIELECTRIC FILM IN A FLASH MEMORY IS USED AS A GATE OXIDE FILM

Claim Rejections Under 35 U.S.C. § 102

The rejection of claims 7-10 and 14 under 35 U.S.C. § 102(b) as being anticipated by Fang (U.S. Patent 6,667,511), of record, is respectfully traversed.

In the present invention, the semiconductor substrate includes the peripheral region on which the CAM cell is formed and the cell region on which the memory cell is formed. It is well-known to a person skilled in the art that a select gate transistor is formed on the cell region, together with the memory cell. That is, the select gate transistor is formed on the cell region, not on the peripheral region. Since a tunnel oxide layer and a floating gate layer

formed on the peripheral region are removed, a dielectric layer is used as a gate oxide layer of the CAM cell formed on the peripheral region.

The peripheral region of the present invention corresponds to the peripheral regions 314, 315 shown in Fig. 9i of Fang. The cell region of the present invention corresponds to the core region 305 shown in Fig. 9i of Fang. Since a select gate transistor 348 is formed on the core region 305 together with the memory cell 346, the select gate transistor 348 cannot correspond to the CAM cell of the present invention. Peripheral transistors 342, 350 of Fang are formed on the peripheral region 314, 315. Therefore, the peripheral transistors 342, 350 of Fang may correspond to CAM cell of the present invention.

A gate oxide layer of the peripheral transistor 342, 350 is formed of an oxide layer, not of the dielectric layer including an oxide layer and a nitride layer. That is, the gate oxide layer of the peripheral transistor 342, 350 of Fang does not include the nitride layer. In other words, Fang does not teach or even suggest that the nitride layer is formed on the peripheral region in order to use the nitride layer as the gate oxide layer.

Accordingly, Applicant submits that the claim 7, as amended, is distinguished over the cited reference. Therefore, claim 7 and the claims which depend directly or indirectly therefrom, are also seen to stand in condition for allowance.

Claim Rejections Under 35 U.S.C. § 103

The rejection of claims 13 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Fang (U.S. Patent 6,667,511) in view of Sheng et al (U.S. Patent 5,981,440), both of record, is respectfully traversed.

Fang does not teach or even suggest that the nitride layer is formed on the peripheral region in order to use the nitride layer as the gate oxide layer. Accordingly, Applicant believes that the claim 13 is patentable over the cited references, and the claims which depend from the base claim 13 are stand in condition for allowance.

Conclusion

It is respectfully submitted that the claims as they have been amended are allowable over the art which has been applied in this Office Action. Favorable reconsideration and allowance of this application are courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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